
Planning and project management computer

Block I. Item 1.

Description, types and phases a computer project

Master in Computer Engineering
University of Granada



goals

- Know the definition of a project and its main features.
- Find out what tasks a project manager and development team are.
- Learn that there are different types of IT projects.
- Knowing the main processes or phases of a software project.
- Know the main certifications of the profession of project manager.

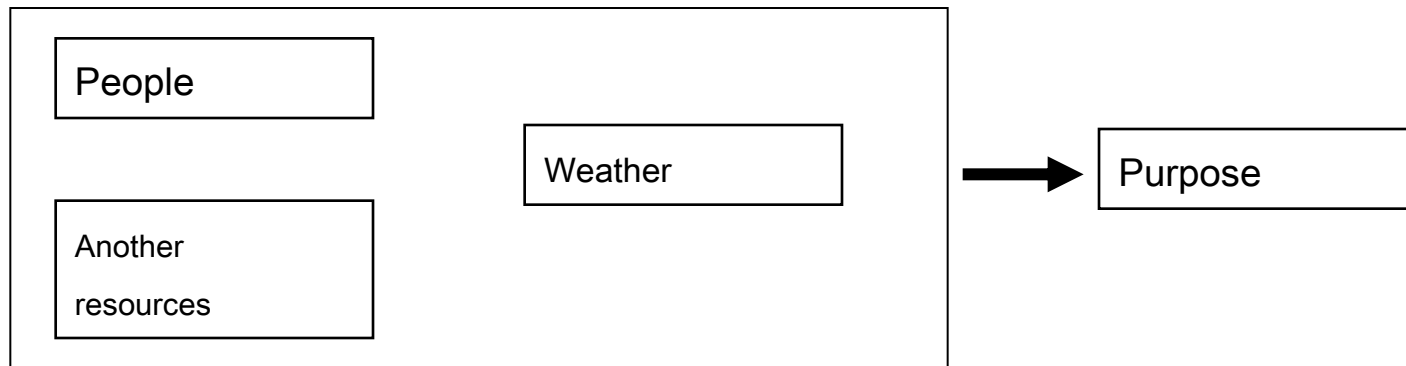
contents

1. Definition of a project.
2. Main features.
3. Types of IT projects.
4. phases or main processes of a computer project.
5. Main certifications of the profession of project manager:
PMBOK, Prince2.
6. Tasks and skills of a project manager and his
development team.

1. Definition of a Project

definition 1

"Is a **combination** from **means** humans and nonhumans together in an organization **temporary** for a **purpose** determined, transforming an idea into a reality "(Del Cos)



1. Definition of a Project

definition 2

"Is a means, medium for a organization scope or conduct a Strategic plan (Usually to keep a business) or answer petitions they are not part of their normal operations "(PMBOK)

1. Definition of a Project

Origin of the project



- Satisfy **need** hypothetical or actual socio-political-economic environment.
- Is an organization that decides a project strategically, based on **previous studies** : Market demand, business opportunity, a customer request, technological advancement and to meet legal requirements.
- The **First** to be made when designing a project is **complete its definition and set objectives** . The **second** , **who seek** it takes place.

2. Project Characteristics

- Is **temporary** (start end?).
- Is **only** and lets you create a service, product or unique result:
uncertainty, expectations and risks.
- It covers **objectives** general and specific (service, production, strategic) by **chores**, with which align.
- It is part of a **program or strategic plan** of a company.
- Usually it divided for development **work packages**



2. Project Characteristics

- It involves **participation** 1 or hundreds of **people** , Of one or more **organizations** .
- involves **stakeholders** : Customers, managers, developers, financiers, ...
- Consume limited and planned resources.
- Usually **iterative** With progressive development.
- Can be **linked to socio-political-environment** .
- It produces **results** or deliverables can be **products, services or knowledge**.

Project 3.Types

- **Basic investigation** : Maximum freedom, risk **no** get **results**

- **Applied research** :

freedom, aimed at testing a particular purpose.

- **Investigation and development** :

prototypes and pre-design with specific objectives, feasibility study and pilot.

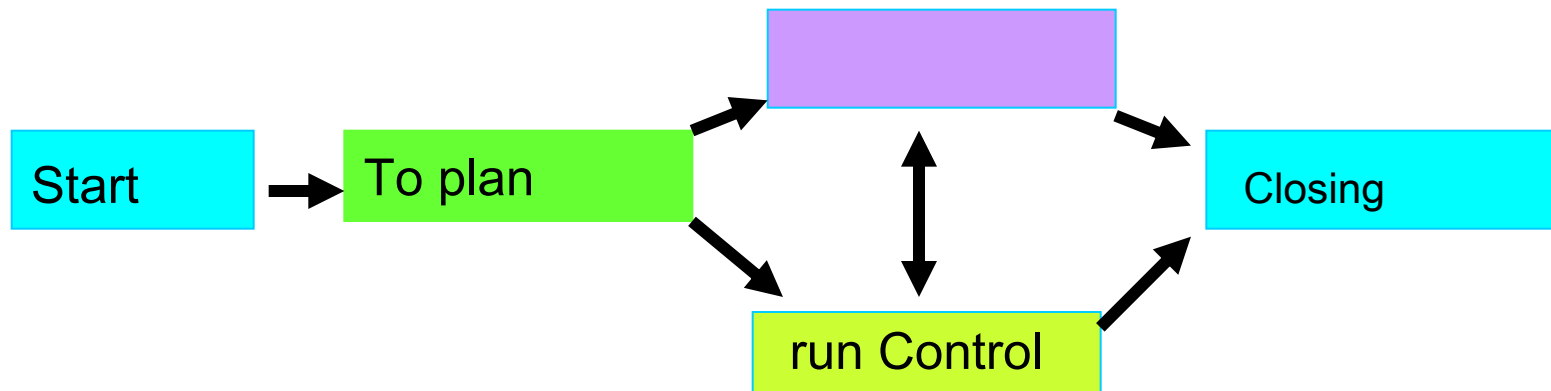
+ **Innovation**: unique new solution

- **Building** :

cost, quantity and nature of the resources to be used is known.

4. Phases in project management

Application of knowledge, skills, tools and techniques, carrying out activities to meet project objectives (PMBOK).



4. Phases in project management

basic management tasks for project control :

- Scope or requirements
- Temporary
- costs
- Quality
- Human Resources.
- Communication
- risks
- Resource acquisition, contracting
- Accessibility
- Documentation

5. Approvals for manager

draft

PMP® :

The **PMP certification** (Project Management Professional) PMI (Project Management Institute) gives its professionals is obtained through an examination,

measures knowledge and understanding of the disciplines of the PMBOK Guide.

He **ESI** in Spain is **Official approved training provider** (REP Provider ID 1038). This ensures that all the contents of their **courses have been reviewed and approved by the PMI** and they are aligned with their methodology, contained in the PMBOK guide.

5. Approvals for manager

draft

Prince2® :

The Accredited Training Organizations (ATOs) are official entities in which can be performed on Prince2 training courses and official examination giving a European certificate validity.

6. The Project Manager

responsibilities

- Obtain expected results and produce the best economic and social impact.
- Organize the team work in a disciplined manner, achieving integration and understanding. (Formal and informal organization parallel).
- Motivate your team to do the job successfully and achieve the objectives.
- Conform to the guidelines, policies, rules and guidelines of the organization.
- Make technical decisions, and economic management.
- Organize their work so finite.

6. The Project Manager

Chores

- Define objectives Y scope
- Organize means
- Do planning, prioritizing Y Assign tasks
- Establish a system information Y communication with involved in the project.
- Establish and control budgets
- Activate the project implementation methodologies of work
- Coordinate implementation of the project
- Define and apply corrective actions
- Control results (Quality objectives)

6. The Project Manager

Qualities or abilities

- Mind structured logic: **command and control**
- **Leadership** to use power effectively and responsibly
- **Acceptance** by the working group
- **Industry knowledge** of the project activity
- **Maturity** : Discipline, concentration, patience, concern, reason, humility

6. The Project Manager

Qualities or abilities

- Training Specific aspects in management
- Creativity
- Capacity for to motivate the development team
- Capacity of delegate or seek advice from others
- Capacity negotiating
- Experience

6. The Project Manager

Qualities or abilities

- flexibility and adaptation
- To accept other ways of doing things
- Capacity for identify problems and seek solutions (Advancement and prosecution)
- Be able to lead people with more technical training.

7. The development team

features

- It is created for the purpose of a project. You can get at the end.
- Multidisciplinary or not: personal choice depending on the project members and their skills, training and skills.
- well defined functions (autonomy) but interdependence (requires trust and communication) between competent members.
- reduced in size.
- If you increase performance and productivity you can shorten schedules.
- It is the factor that implies greater success in a project.

7. The development team

Principal functions

- ID requirements
- Adjusting to carry out their work goals, time, budget, and quality risks.
- Communication and working with others involved, with different needs and expectations.

7. The development team

Organization

Conditioned by the structure and organization of company that undertakes the project and the project itself. (Cos)

- Functional units
- independent complete equipment
- Matrix or combined

7. The development team

positive roles:

- Driving
- Conciliator
- Animator
- Producer
- Creative
- finisher
- Coordinator
- Specialist
- Rater / reviewer

negative roles:

- Domineering
- passive
- Opositor
- Pessimistic
- Smarty

What to do with them?

Task Item 1

1. Given the assumption of a proposed organization of a party, and taking into account certain requirements discussed in class by the teacher, complete the following planning tasks:
 - Make a Gantt chart with the activities undertaken in the project.
 - Establishing the list of project resources by completing a table with more details.
 - Make a project budget.

This activity is performed in groups of 6 in theory class. Calls for a responsible of each group deliver a digital document (document scanning photographs or made).

Task Item 1

2. Make a comparative table of the main features of PMP and Prince2 (one page)
3. Look for a company in Spain to issue a PMP or Prince2 certification and complete a form with the following information about the company:
 - Company name
 - Type certificates issued
 - Type PMBOK or Prince2 courses organized
 - Course content (if available)
 - Place, date and cost of the next course in Spain

Tasks 2 and 3 are made individually. Delivery on the decsai platform until October 11